

Title (en)
THREE DIMENSIONAL PRINTING MATERIAL SYSTEM AND METHOD

Title (de)
MATERIALSYSTEM FÜR DAS DREIDIMENSIONALE DRUCKEN UND VERFAHREN

Title (fr)
MATERIAU, SYSTEME ET PROCEDE D'IMPRESSION TRIDIMENSIONNELLE

Publication
EP 1542858 A1 20050622 (EN)

Application
EP 03759353 A 20030918

Priority
• US 0329714 W 20030918
• US 25513902 A 20020925

Abstract (en)
[origin: US2004056378A1] The present invention is directed to a three-dimensional printing system and method, and an article made therefrom. The method of the present invention includes building cross-sectional portions of a three dimensional article, and assembling the individual cross-sectional areas in a layer-wise fashion to form a final article. The individual cross-sectional areas are built using an ink-jet printhead to deliver an aqueous fluid to a particle material that includes a first particulate material, a second particulate material, and a third particulate material, wherein the first and second particulate materials react in the presence of the fluid in a period of time, and the third particulate material reacts in the presence of the fluid to form a solid in a longer period of time.

IPC 1-7
B29C 67/00; **B29K 105/00**

IPC 8 full level
B27N 3/02 (2006.01); **B28B 1/00** (2006.01); **B29C 41/02** (2006.01); **B29C 67/00** (2006.01); **C04B 28/14** (2006.01); **C04B 28/30** (2006.01); **C04B 28/34** (2006.01); **B29K 105/00** (2006.01)

CPC (source: EP KR US)
B27N 3/02 (2013.01 - KR); **B28B 1/001** (2013.01 - EP US); **B28B 7/465** (2013.01 - EP US); **B29C 41/02** (2013.01 - KR); **B29C 64/165** (2017.07 - EP US); **B29C 67/00** (2013.01 - KR); **B33Y 70/10** (2020.01 - EP KR US); **C04B 28/14** (2013.01 - EP US); **C04B 28/30** (2013.01 - EP US); **C04B 28/34** (2013.01 - EP US); **B33Y 80/00** (2014.12 - EP US); **C04B 2111/00181** (2013.01 - EP US)

Citation (search report)
See references of WO 2004028787A1

Cited by
CN107840673A; US8105517B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2004056378 A1 20040325; **US 7087109 B2 20060808**; AU 2003275083 A1 20040419; CA 2500012 A1 20040408; EP 1542858 A1 20050622; EP 1542858 B1 20131106; HK 1077541 A1 20060217; JP 2006504813 A 20060209; JP 4782424 B2 20110928; KR 20050061478 A 20050622; US 2006230984 A1 20061019; WO 2004028787 A1 20040408

DOCDB simple family (application)
US 25513902 A 20020925; AU 2003275083 A 20030918; CA 2500012 A 20030918; EP 03759353 A 20030918; HK 05109438 A 20051024; JP 2004540142 A 20030918; KR 20057005018 A 20050324; US 0329714 W 20030918; US 45369506 A 20060615